

## REMARKS

Claims 1-4, 8, 10, 15, and 18-20 are amended. Claims 5, 6, 12, 13, 16, and 17 are cancelled. Claims 21 and 22 are added. Hence, Claims 1-4, 7-11, 14, 15, 18-22 are pending in the Application.

### I. THE FINALITY OF THE OFFICE ACTION SHOULD BE WITHDRAWN TO CORRECT ERRORS IN THE FINAL OFFICE ACTION

The Office Action mailed May 13, 2004 has been made final improperly, and Applicants respectfully request the Office to withdraw the finality of the Office Action to correct errors in the action.

In particular, the Office Action does not answer several arguments for patentability that are presented in Applicants' reply filed March 3, 2004. For example, the Applicants argued that (1) Wallace et al. includes negative teachings, (2) Edson explicitly recites that including the IP protocol on the phone line rather than using a protocol that excludes IP, and (3) Rabenko et al. include an explicit recitation that network lines allow for bidirectional IP and therefore also do not exclude IP. The Examiner is required to answer the substance of an applicant's argument, according to MPEP 707.07(f). Therefore, Office Action does not comply with MPEP 707.7(f), and a new Office Action should be issued, with a new date from which the statutory period for reply runs. MPEP 710.06.

### II. PROVISIONAL APPLICATIONS

The Office Actions relies in part on subject matter found only in the provisional applications from which Rabenko et al. claims priority. Under 35 USC §102(e)(1), a published non-provisional application is effective as a reference as of its effective filing date only for the

subject matter supported by its priority documents. However, a provisional application relied upon for priority is not itself a valid reference under 35 USC §102(e)(1), because provisional applications are not “published under 35 USC §122(b)” as required by §102(e)(1). Thus, a provisional application is not effective as a reference as of its filing date. In contrast, a provisional application becomes a reference only as of the date that it becomes public (if it does become public).

The provisional applications on which Rabenko et al. relies for priority became public on January 17, 2002, as a result of the publication of the Rabenko et al. non-provisional application. However, January 17, 2002 is later than the filing date of the present application. Thus, Rabenko et al. is a reference only for subject matter supported by both the published non-provisional application and its priority documents. The Office Action may not reject a claim of Applicants’ application based upon subject matter that is supported only by the Rabenko et al. non provisional application alone, or only by one of the two provisional applications on which Rabenko et al. relies for priority.

### III. THE CLAIMS ARE ALLOWABLE OVER THE CITED REFERENCES

#### A. ANTICIPATION REJECTION OF CLAIMS 1-2, 4-9, AND 11-19

Claims 1-2, 4-9, and 11-19 were rejected under 35 USC 102(e) as allegedly anticipated by the Rabenko et al. published non-provisional patent application.

The independent claims are not anticipated by Rabenko et al. As amended, Claims 1, 8, 15, and 18 recite,

setting a field in a frame header of the voice packets associated with digitized voice and digitized voiceband indicating that the voice packets are to be transmitted at a highest level of priority...; and  
transmitting said voice packets over a the local area network...that supports levels of transmission priority for transmitting data, wherein the voice packets associated

with the digitized voice and digitized voiceband are transmitted at the highest level of priority as indicated by the setting of the field in the frame header.

Thus, the voiceband and digitized voice packets use the highest priority of the LAN. Rabenko et al. fail to teach this feature. Additionally, Rabenko et al. do not disclose setting the field in the frame of the packet to indicate the priority.

The Office Action contends that Rabenko et al. shows “wherein voice packet has a high priority than the data packet for transmitting via HPNA ...; See Pages 2, Sec 32 to Page 3, Sec 47; See Pages 6-7, Sec 74, 77, 78, 80-88; Page 11, sec 120, Page 15, sec 143, 152; Page 16, Sec 160-165, Page 21-26, Sec 216-267.” However, none of the passages cited above discuss giving the highest priority to the transmission to the digitized voice and voice band packets. Thus, the argument of the Office Action is not supported in Rabenko et al. Reconsideration is respectfully requested.

As amended, Claims 1, 8, 15, and 18 recite,

wherein said voice packets conform to a set of protocols that excludes Internet Protocol (IP);...

and

transmitting said voice packets over athe local area network without a separate voice dedicated network and without a logically separate voice network ....

The Office Action (at the paragraph bridging pages 2 and 3) contends that “Rabenko discloses ... wherein the IP excludes from LAN; See Pages 2, Sec 32 to Page 3, Sec 47; See Pages 6-7, Sec 74, 77, 78, 80-88; Page 11, sec 120, Page 15, sec 143, 152; Page 16, Sec 160-165, Page 21-26, Sec 216-267.” Applicants disagree. Many of these passages suggest translating VoIP packets of a WAN to a VoHN format associated with a LAN. However, none of the numerous cited passages recite excluding IP packets from the LAN. Additionally, Rabenko et al. states,

[0051] In addition, the described exemplary embodiment can support multiple inputs in accordance with *a variety of protocols*. For example, a universal serial bus transceiver 204 can provide transparent *bi-directional IP traffic* between devices operating on a USB such as for example a PC (personal computer) workstation, server printer or other similar

devices (not shown). Additionally, an IEEE 802.3 compliant media independent interface (MII) 210 in conjunction with an Ethernet MAC 211 can also provide bi-directional data exchange between devices such as, for example a number of PCs and/or Ethernet phones (not shown) (emphasis added).

Thus, packets on Rabenko et al.'s network are IP protocol packets, and may be carried in a logically separate network. In contrast, the Applicants' Overview teaches not to use a logically separate network, as reflected in the amended claims. Further, the Applicants' background section, at page 6, describes the disadvantages of using voice over IP, which requires the RTP protocol. In contrast, at paragraph 0101 Rabenko et al. state that RTP is required. Because RTP is always used over IP, Rabenko et al. does not exclude IP, in contrast to Claims 1, 8, 15 and 18. The Office Action fails to address this argument.

As emphasized in Applicants' prior reply, although Rabenko et al. may provide that some traffic can have its format converted, Rabenko et al. explicitly states (in paragraph 0051) that their network "can provide transparent *bi-directional IP traffic* between devices". Consequently, in contrast to Claim 1, Rabenko et al. do not exclude IP packets or a logically separate network.

Accordingly, Claims 1, 8, 15, and 18 each recite at least one feature that is not found in Rabenko et al. Therefore, a rejection for anticipation under 35 USC 102 is not supported in the references of record. Reconsideration and withdrawal of the rejection of Claims 1, 8, 15, and 18 are respectfully requested.

Claims 8 and 15 further recite "a Subscriber Line Interface Circuit (SLIC) configured to receive analog phone signaling and generate digitized phone signaling." Addressing this feature, the Office Action states (at page 2), "Rabenko discloses SLIC for receiving a DTMF signal and digitizing the DTMF signal before input into a packetizing engine for generating a DTMF packet for transmitting via local area network which uses HPNA protocol as claims 8 and 15 (See sec 162, 164-165, 259 (See Fig 16 of 137, figs 6, 39, 44-47, 057, Figs 6, 39, 44-47))." However, paragraphs 0162, 0164, and 0165 discuss portions of FIG. 7. FIG. 7 is related to the phone 108

(on line 106a), as indicated by the references to phone 108 in paragraphs 0154, 0155, 0162, and 0163, for example. Phone 108 is an ordinary POTS telephone using line 106a, which is not a network and does not use HPNA protocol. Thus, SLIC 109 is not part of a “network device”.

Additionally, paragraphs 0162, 0164, 0165, 0259 never mention a SLIC. In contrast, claims 8 and 15 recite a “network device...comprising... a Subscriber Line Interface Circuit (SLIC)”.

Claims 2, 4, 7, 9, 11, 14, and 19 each depend, directly or indirectly, on an independent claim that is discussed above. Because each of the dependant claims include the limitations of claims upon which they depend, the dependant claims are patentable for at least those reasons the claims upon which the dependant claims depend are patentable. Removal of the rejections with respect to the dependant claims and allowance of the dependant claims is respectfully requested. In addition, the dependent claims introduce additional limitations that independently render them patentable. Due to the fundamental difference already identified, a separate discussion of those limitations is not included at this time.

B. OBVIOUSNESS REJECTION OF DEPENDENT CLAIMS 3, 10, AND 20

Claims 3, 10, 20 were rejected under 35 USC 103 based upon Rebenko et al. in view of Czajkowski et al. Reconsideration is respectfully requested.

The Office Action (at page 4) states, “the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either *in the references themselves or in the knowledge generally available to one of ordinary skill in the art*. ... In this case, Rabenko suggests that ATM is used for transporting voice ... The motivation would have been to effectively enhance voice over ATM transport for any voice rates by

transporting the small packets, obtain a bandwidth efficient in the delay sensitive applications and multiplexing a plurality of voice channels...”

However, the Office Action fails to explain the **source** of the motivation. The stated motivation is not found in the references or any other source. Indeed, the references fail to recognize (1) that the AAL2 packets are small, (2) that the smallness of the AAL2 packets enhances ATM transport for any voice rates, and (3) that such transport would “obtain a bandwidth efficient in the delay sensitive applications and multiplexing a plurality of voice channels”. Although Czajkowski et al. discuss how to accommodate AAL2, if AAL2 should be used, Czajkowski et al. do not give a reason why to use AAL2. The words “small” and “size”, for example, do not appear in Czajkowski et al., and the Applicants are not aware of such teachings in Czajkowski et al.

The Office Action appears to rely on personal knowledge of the Examiner not found in the references. If so, Applicants respectfully request citation of a supporting reference. 37 CFR §1.104 (d)(2).

Further even if the Office Action is correct that AAL2 is more efficient, the motivation of AAL2 as more efficient is not suggested in the prior art cited by the Office Action. The prior art must suggest the desirability of the claimed invention. MPEP 2143.01, p. 2100-125; *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Thus, even if an alleged motivation is factually true, but is not taught, suggested, or otherwise recognized in the prior art, then the stated motivation is insufficient under §103.

The Office Action further contends, in response to Applicants’ prior argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, “*so long as it takes into account only knowledge which was within the level of ordinary skill* at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's

disclosure, such a reconstruction is proper” (emphasis added). However, the alleged motivation in the Office Action takes into account unsupported assertions regarding alleged advantages in the smallness and bandwidth of AAL2 that have not been demonstrated to be “*only knowledge which was within the level of ordinary skill*”. Consequently, following the criteria in the Office Action, the alleged motivation is hindsight. Because the Office Action has not proffered any proof for the alleged motivation to combine Rabenko et al. and Czajkowski et al., the Office Action has not established a prima facie case of obviousness as required under 35 USC 103(a). Therefore, the rejection should be withdrawn.

C. OBVIOUSNESS REJECTION OF CLAIMS 1-20

Claims 1-20 were rejected under 35 USC 103(a) as allegedly unpatentable over Edson in view of Wallace.

Referring first to Claims 1, 3, 10, 8, 15, 18, and 20, Edson and Wallace et al. do not disclose using the highest priority for digitized voiceband and digitized voice, and do not disclose indicating the priority by setting a field in the header frame of the digitized voiceband and digitized voice packets, as now recited in each of the independent Claims 1, 8, 15, and 18.

Regarding these claims, the Office Action (at page 5) relies on the same motivation articulated above, “to obtain a bandwidth efficient in the delay sensitive applications” and the “small size” of AAL2 packets, as a rationale for combining Edson and Wallace et al. However, the Office Action fails to explain how Wallace et al. or Edson recognize (1) that the AAL2 packets are small, (2) that the smallness of the AAL2 packets enhances ATM transport for any voice rates, and (3) that such transport would “obtain a bandwidth efficient in the delay sensitive applications and multiplexing a plurality of voice channels”. Although Wallace et al. discuss how to accommodate AAL2, if AAL2 should be used, Wallace et al. do not state why to use

AAL2. For example, the words “small” and “size” do not appear in Wallace et al., and the Applicants are not aware of such teachings in Wallace et al.

Additionally, even if Edson uses AAL2 packets, Edson and Wallace et al. fails to teach use of a protocol excluding IP packets without using a logically separate network on the LAN of Edson. In fact, Edson et al. teaches away from Applicants’ claims, by explicitly requiring IP, as stated at column 8, lines 22-28 (“In accord with one aspect of the invention, this processing also entails digital compression decompression, packet assembly/disassembly and appropriate signaling to enable *Internet Protocol (IP) transport* of the telephone communication signals, for example *through the gateway 13* and one of the high-speed links to the public Internet ...” [emphasis added]). Thus, in contrast to claims 1, 8, 15, and 18, Edson disclose carrying IP packets through gateway 13 onto line 21, and do not exclude IP packets from the LAN.

The Office Action’s position is also incorrect because AAL2 is not normally efficient in its power usage of ATM cells. For example, Wallace et al. (at column 7, lines 32-53) teaches that AAL2 ATM voice transport does not inherently achieve lower power consumption, but that a special “profile” must be used for the AAL2 ATM during low power operations.

Further, the low power operations of Wallace et al. are not normally used. Instead, Wallace et al. (at column 7, lines 26-31) state that “*On detection of loss of power to the customer premises equipment ..., the CPE switches Into(sic) a low-power mode*, so that it operates from power which is supplied by DC feed down the subscriber line alone, without the need for support from any other external power source.” One reason low power operations are not normally used is because they may even “Involve dropping some calls in progress”.

Thus, Wallace et al. are willing to tolerate inferior operations (such as those of the special “profile” for the AAL2) during emergency low power operations. If the special profile required for AAL2 ATM was desirable, it would be used all the time, and not just during low power



operations. While Wallace may teach a workaround for using AAL2, Wallace et al. does not suggest usage of AAL2, and even suggests that normal AAL2 profiles are not efficient; therefore, Wallace et al. *teach away* from using AAL2. For this reason, one of ordinary skill in the art would not think to modify Edson based on Wallace et al.

Claim 1 recites “converting analog phone signals into packets for transporting digitized voice”. Claims 8, 15, and 18 include similar recitations. However, Wallace et al. teach that conventional VoDSL (and thereby imply that any other conventional digital signal) requires power during normal operations, and cannot be supported if there is a power failure at the customer premises. See Wallace et al., column 1, lines 28-40. Although Wallace et al. provide a workaround for dealing with the power needs of VoDSL (or other digital signal) during a power outage at the customer cite, Wallace et al. admit that their workaround has disadvantages such as “calls may be dropped”, which is significant. Thus, one of ordinary skill in the art would have concluded, from Wallace et al. that using analog signals for phones in the house is better so that phone service is still available during power outages and calls in progress do not need to be dropped using Wallace et al.’s workaround. In contrast, claim 1 recites “converting analog phone signals into digital phone signals”, and Edson includes a digital to analog converter 312 on analog phone 32. Thus, Wallace teaches away from using the system of Edson and from the invention of claim 1.

Prior art must be considered in its entirety, including disclosures that teach away from the claims. MPEP 2141.03, p. 2100-122; *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). The Office Action has not addressed these negative teachings of Wallace et al., which Applicants identified in reply to the prior Office Action. These negative teachings of Wallace et al. also teach away from modifying Rabenko et al. to use AAL2.

Because of the negative teachings identified herein, the rationale of the Office Action is unsupported. Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 1, 3, 10, 8, 15, 18, and 20 based on Edson in view of Wallace et al.

The claims also differ from the cited references with respect to the number, nature and type of networks that are provided. Edson illustrates a two-line system including line 23, having a computer 43, and line 21, having an analog phone 32. The manner in which Edson proposes to “effectively provide all devices coupled to the internal media [with a means] to communicate via any of the external networks” is by “the routing function” of gateway 13 (column 8, lines 51-56). Hence, Edson uses a routing function so that different devices are placed on different lines to be served by gateway 13; without the routing function, gateway 13 may not be able to accommodate the device on line 21 or line 23. Thus, Edson intentionally separates the devices of line 23 (such as the computer 43) and line 21 (such as the phone 32). Consequently, Edson provides a separate network for phones 32 and computer 43, in contrast to claims 1, 8, 15, and 18.

Since the IP protocol intended for the computer and IP protocol intended for the phone are routed to different lines, there cannot be any motivation to provide the AAL2 protocol (as recited in claim 3) or “packets [that] conform to a set of protocols that excludes IP” (as recited in independent claims 1, 8, 15 and 18) to line 23 having computer 43, because computers often use IP for communicating.

Further, regarding line 21 and telephone 32, Edson (at column 8, lines 18-28) states,

However, the D1/2 interface 312 also provides the necessary conversions between digital and analog and sends and receives data messages over the media 21 relating to the standard telephone line signaling used by the POTS telephone 32. ***In accord with one aspect of the invention, this processing also entails digital compression decompression, packet assembly/disassembly and appropriate signaling to enable Internet Protocol (IP) transport of the telephone communication signals, for example through the gateway 13 and one of the high-speed links to the public Internet (emphasis added).***

Thus, Edson also teaches the use of IP on line 23 in conjunction with phone 32 and interface 312.

Consequently to exclude IP, as claimed, is contrary to the teachings of Edson. A *prima facie* case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the claimed invention. *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997). MPEP 2145.03 (III), p. 2100-138. The Office Action has not responded to the above previously presented arguments.

Edson at column 13, lines 29-34 further states,

The analog interface 55 switches between an analog mode and a digital mode. In the analog mode, the interface simply passes signals between the telephone 32 and an analog link 56. In the digital mode, however, the interface 55 emulates a POTS type analog telephone loop from an end office type telephone switching system.

Thus, Edson's analog interface has an analog mode in which it merely passes analog signals.

Passing analog signals is a passive activity that does not require any power consumption.

Therefore, in the case of a power outage, one using Edson's system merely switches to analog mode, without losing any calls or being inconvenienced with the special AAL2 packets that need to be used when Wallace et al. have a power outage. Consequently, one of ordinary skill in the art would not modify the device of Edson by using Wallace et al.'s device, because Wallace et al.'s device would unnecessarily degrade the phone reception during a power outage.

For all the foregoing reasons, the combination proposed by the Office Action is improper. Accordingly, the rejection of Claims 1-20 under 35 USC 103 should be withdrawn. Reconsideration is respectfully requested.

The pending claims not discussed so far are dependant claims that depend on an independent claim that is discussed above. Because each of the dependant claims include the limitations of claims upon which they depend, the dependant claims are patentable for at least those reasons the claims upon which the dependant claims depend are patentable. Removal of the rejections with respect to the dependant claims and allowance of the dependant claims is respectfully requested. In addition, the dependent claims introduce additional limitations that

independently render them patentable. Due to the fundamental difference already identified, a separate discussion of those limitations is not included at this time.

#### IV. NEW CLAIMS 21 AND 22

New dependent Claims 21 and 22 recite that the network includes telephones and computers on the same line. In contrast, Edson places telephones and computers on different lines. For this reason, and all the reasons given above with respect to the base claims from which Claims 21-22 depend, Claims 21-22 are allowable.

#### V. CONCLUSION

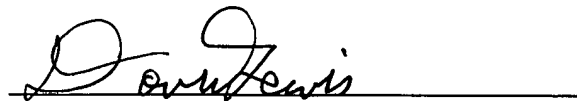
For the reasons set forth above, Applicant respectfully submits that all pending claims are patentable over the art of record, including the art cited but not applied. Accordingly, allowance of all claims is hereby respectfully solicited.

No fee or extension fee is believed to be due. However, to the extent necessary, Applicants petition for an extension of time under 37 C.F.R. § 1.136. The Commissioner is authorized to charge any fee that may be due in relation to this application to our Deposit Account No. 50-1302.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

Respectfully submitted,

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